



H.R. 1867 – National Science Foundation Authorization Act of 2007

Floor Situation

H.R. 1867 is being considered on the floor pursuant to a rule. The rule:

- Provides one hour of debate equally divided and controlled by the Chairman and Ranking Minority Member of the Committee on Science and Technology.
- Waives all points of consideration of the bill except for clauses 9 (earmarks) and 10 (PAYGO) of Rule XXI.
- Makes in order only those amendments preprinted in the *Congressional Record* or are pro forma amendments for the purpose of debate. Amendments will be debated under the 5 minute rule.
- Provides that, notwithstanding the operation of the previous question, the Chair may postpone further consideration of the bill to a time designated by the Speaker.
- Provides one motion to recommit with or without instructions.

This legislation was introduced by Representative Brian Baird (D-WA) on April 17, 2007. The bill was ordered to be reported from the Committee on Science and Technology, by voice vote on April 19, 2007.

H.R. 1867 is expected to be considered on May 2, 2007.

Summary

The bill authorizes funds for the National Science Foundation (NSF) for the fiscal years 2008, 2009, and 2010.

Authorizations for fiscal year 2008

- The bill authorizes to the NSF \$6.5 billion, of which:
 - \$5.1 billion is for research and related activities, with \$115 million specifically made available for the Major Research Instrumentation

program; and,

- \$873 million is for education and human resources;
- \$245 million is for major research equipment and facilities construction;
- \$285.6 million is for agency operations and award management;
- \$4,050,000 is for the Office of the National Science Board; and,
- \$12,350,000 is for the Inspector General.

Authorizations for fiscal year 2009

- The bill authorizes to NSF \$6,980,000,000, of which:
 - \$5,457,400,000 is for research and related activities, with \$123.1 million specifically made available for the Major Research Instrumentation program;
 - \$934 million is for education and human resources;
 - \$262 million is for major research equipment and facilities construction;
 - \$309,760,000 is for agency operations and award management;
 - \$4,120,000 is for the Office of the National Science Board; and,
 - \$12,720,000 is for the Inspector General.

Authorizations for fiscal year 2010

- The bill authorizes to NSF \$7,493,000,000, of which:
 - \$5,863,200,000 is for research and related activities, with \$131.7 million specifically made available for the Major Research Instrumentation program;
 - \$1,003,000,000 is for education and human resources;
 - \$280 million is for major research equipment and facilities construction;
 - \$329,450,000 is for agency operations and award management;
 - \$4,250,000 is for the Office of the National Science Board; and,

- \$12,100,000 is for the Inspector General.

Award for Major Research Instrumentation

- Allows for awards to be granted for Major Research Instrumentation. These awards shall be between \$100,000 and \$4 million, except if the total amount authorized for the Major Research Instrumentation program is more than \$125 million, then the maximum award may not exceed \$6 million.
- These funds may also be used to support the operations and maintenance of instrumentation and equipment.

Undergraduate Education Programs

- Requires that an institution of higher learning receiving funds for the program must provide at least 30% funding from private or non-federal entities. However, the bill waives this clause (or reduces the funding match) if the institution of higher learning:
 - Does not offer a Ph.D. program;
 - Is not ranked in the top 100 of institutions receiving Federal research and development funds;
 - Can prove that the project will make a substantial impact on the institution's research; or,
 - Is a consortia of institutions of higher education that includes at least one non-Ph.D granting institution.

Centers for Research on Learning and Education Improvement

- The bill directs the Director of the Foundation ("the Director") to continue the program of Centers for Research on Learning and Education Improvement ("the Centers"). The Centers conduct and evaluate research in cognitive science, education, and related fields, and develop ways in which the results of such research can be applied in elementary school and secondary school classrooms to improve the teaching of mathematics and science.

**Note: This Center was established in Section 11 of the National Science Foundation Authorization Act of 2002.*

Interdisciplinary Research

- The National Science Board ("the Board") must evaluate the Foundation's role in supporting interdisciplinary research, and its efforts to engage undergraduate

students in research experiences in interdisciplinary settings.

- The board must provide results on its findings, including a recommendation for the proportion of the Foundation's research and related activities that should be allocated for interdisciplinary research.

Pilot Program of Grants for New Investigators

- The bill creates a pilot program to award grants to those individuals whose proposals were submitted to the Foundation but were denied. The one-year grant aims to assist in improving research proposals.
- These funds must be used by the individual to "support the generation of new data" in order to resubmit a proposal for review by the Foundation.
- To receive this grant an individual must:
 - Not have received funding as a principal investigator from the Foundation; and,
 - Have submitted a proposal to the Foundation that was rated very good or excellent under the Foundation's competitive merit review process but not accepted.

Broader Impacts Merit Review Criterion

- Requires the Director to give special consideration to proposals that involve partnerships between academic researchers and industrial scientists and engineers that involve research areas considered to have high importance for future national economic competitiveness.

Reporting of Research Results

- The final project reports and published research citations from any federally-funded NSF research must be available to the public in electronic form on the Foundation's website.

Sharing Research Results

- If the Director of the Foundation determines that any individual conducting research as part of a Foundation grant that does not comply with Section 734 of the Foundation Grant Policy Manual (accurate authorship, sharing of findings), then that individual may not be eligible for future grants. However, the Director may restore the eligibility of an individual if that individual complies with Section 734.

Funding for Successful STEM Education Programs

- The Director may extend grants from 1 year to 3 years for those individuals that meet the primary qualifications of the Science and Engineering Equal Opportunity Act (42 U.S. Code 1885 et seq.) or that have the primary purpose of providing teacher professional development.

Donations

- Allows for donations to be made for specific prize competitions.

Amendments Preprinted in the Congressional Record

1) Rep. Honda (D-CA) The amendment would require the Director to support informal educational materials, exhibits, and multimedia presentations relevant to global warming, climate science, and greenhouse gas reduction strategies. The amendment also requires that as part of Discovery Research K-12 activities, the Director shall support the development of K-12 educational materials relevant to global warming, climate science, and greenhouse gas reduction strategies.

2) Price (R-GA). The amendment would apply PAYGO to the provisions in H.R. 1867, requiring all spending in the bill to be offset by decreasing spending elsewhere.

3) Rep. McNerney (D-CA) The amendment would create a program to award grants on a competitive, merit-reviewed basis to Hispanic-serving institutions. The purpose of the grant is to improve the quality of undergraduate courses and curriculum in science, mathematics, engineering, and technology at Hispanic-serving institutions.

4) Rep. Campbell (R-CA) The amendment would reduce authorization of funds by 1%.

5) Rep. Campbell (R-CA) The amendment would prohibit funds from being used to research related to the archives of Andean Knotted-String Records, the accuracy in the cross-cultural understanding of other's emotions, bison hunting on the late prehistoric Great Plains, team versus individual play, sexual politics of waste in Dakar, Senegal, social relationships and reproductive strategies of Phayre's Leaf Monkeys, and cognitive model of superstitious belief.

6) Rep. Vern Ehlers (R-MI) The amendment expresses the Sense of Congress that the Math and Science Partnership Programs at the National Science Foundation and the Department of Education are unique and perform complimentary roles.

7) Rep. Flake (R-AZ) The amendment would strike Section 6, which creates a pilot program to award grants to those individuals whose proposals were submitted to the Foundation but were denied. The one-year grant aims to assist in improving research proposals.

8) Rep. Matsui (D-CA) The amendment would require the Director to provide grant supplements, on a competitive, merit-reviewed basis, to institutions receiving grants under the Integrative Graduate Education and Research Traineeship Program.

9) Rep. Weldon (R-FL) The amendment would tie the funding levels of the Foundation to the appropriation levels of the National Aeronautics and Space Administration and the National Aeronautics and Space Administration Exploration Systems.

10) Rep. Garrett (R-NJ) The amendment would prohibit funds from being used to research relating to the reproductive aging symptom experience at midlife among Bangladeshi immigrants, Sedentees, and White London Neighbors, and the diet and social stratification in ancient Puerto Rico.

11) Rep. Garrett (R-NJ) The amendment would reduce authorization of funds by 0.5%.

12) Rep. Marjorie H. Green (R-IL) The amendment would require the Director of the NSF to solicit proposals for annual research on mercury levels in the Great Lakes, specifically detailing trend and source of mercury in water levels and fish.

Background

The National Science Foundation was created by Congress in 1950 "to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense." This independent agency of the United States Government supports education and research into science and engineering and funds roughly 20% of federally supported research conducted by universities and colleges in America.

The director, deputy-director, and all 24 members of the Board are appointed by the President and confirmed by the Senate.

Legislative Background

Typically, Congress provides authorizations for funding of the National Science Foundation every 5 years.

In the 107th Congress, the House of Representatives passed H.R. 4664 by a recorded vote of 397-25 ([Roll no. 212](#)) on June 5, 2002. The Senate later passed the bill by unanimous consent and President Bush signed the bill into law on December 19, 2002.

In the 105th Congress, the House of Representatives passed H.R. 1273 by a voice vote on April 24, 1997. The Senate passed the bill by a recorded vote on 99-0 ([Record Vote No: 127](#)). President Clinton signed the bill into law on July 29, 1998 (Public Law No: 105-207).

Cost

“H.R. 1867 would authorize the appropriation of about \$21 billion over the 2008-2010 period for ongoing operations of the National Science Foundation (NSF). NSF provides funding for basic research in science and engineering, as well as programs to improve science education and infrastructure. Assuming appropriation of the specified amounts, CBO estimates that implementing H.R. 1867 would cost \$1.5 billion in 2008 and \$19.5 billion over the 2008-2012 period. Enacting H.R. 1867 would have no significant effect on direct spending or revenues.” Congressional Budget Office Cost Estimate
<http://www.cbo.gov/ftpdocs/80xx/doc8031/hr1867.pdf>

Additional Information

[National Science Foundation Website](#)

[National Science Foundation Grant Policy Manual](#)

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